

I claim:

1. A stucco wall structure for a building, comprising:

a wall substrate arranged for receipt of subsequent layers of surface material;

a peripheral screed arrangement disposed on said wall substrate to provide dimensional and finish guidance to subsequent layers of material of said wall structure;

a sprayed-on coating of urethane onto said wall substrate to insure continuous bonding and adherency to between said substrate and said urethane;

a first layer of polymer-based base coat and mesh covering said sprayed-on coating of urethane to provide anchoring and adhesion of a subsequent layer of material; and

an outer layer of stucco applied over said first layer of polymer-based base coat as a final coat thereon.

2. The stucco wall structure as recited in claim 1, including a vacuum planer for smoothing said foam layer of urethane.

3. The stucco wall structure as recited in claim 1, wherein said sprayed-on coating of foam is thicker than said screed.
4. The stucco wall structure as recited in claim 1, wherein said first layer of polymer-based base coat and mesh is about 1/8 inch thick.
5. The stucco wall structure as recited in claim 1, wherein said final layer of stucco is about 1/4 inch thick.
6. The wall structure as recited in claim 1, wherein said wall structure has a peripheral margin and an opening margin, wherein a screed is placed around said margin to facilitate interlocking said sprayed-on foam thereto.
7. The wall structure as recited in claim 1, wherein said screed is of “L” shape in cross-section.
8. The wall structure as recited in claim 1, wherein said screed is of “J” shape in cross-section.

9. The wall structure as recited in claim 1, wherein said outer layer of stucco is comprised of a thin sheet of brick face.
10. A method of insulating and finishing a vertical wall structure which is impervious to water, comprising the steps of:
- cleaning a surface of said wall structure to be treated;
 - applying a screed to the peripheral margins of said surface of said wall to be treated;
 - spraying a urethane foam directly onto said surface of said wall structure defined between said screeds;
 - applying a first coat of polymer enhanced base coat and mesh onto said sprayed-on coat of urethane foam; and
 - applying a stucco finish material onto said sprayed layer of urethane foam and said first coat of polymer-based base coat and mesh.

11. The method as recited in claim 10, including the step of:

vacuum planing said sprayed-on coat of urethane foam with an elongated vacuum planer prior to application of said first coat of polymer-based base coat and mesh.

12. The method as recited in claim 11, including the step of:

guiding said vacuum planer at one end thereof, by riding said planer on said screed, to facilitate the proper thickness planing of said urethane foam.

13. The method as recited in claim 12, including the step of:

planing said sprayed-on foam to a level even with said screed.

14. The method as recited in claim 11, including the step of:

vacuuming said foam spray being planed from said wall structure by a vacuum source connected to said vacuum planer.